

NWS FORM E-5 (11-88) (PRES. by NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) WFO Jackson, Mississippi
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR: MONTH YEAR February 2006
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE Alan E. Gerard, MIC In Charge of HSA DATE March 10, 2006

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)

Synopsis...

The month of February was characterized by mostly above normal rainfall over the area with the exception of Southwest Mississippi and extreme southern portions of Southeast Mississippi. Several periods of cold temperatures occurred during the month. A few snow flurries were reported over the northern sections from late on the 10th into early on the 11th. Some icing conditions occurred over extreme northwest sections of the Hydrologic Service Area (HSA) on the 17th and over most northern sections on the 19th and 20th.

A strong low pressure center and an associated cold front moved across the area on the 2nd. The front stalled along the coast on the 3rd. Thunderstorms set up north of the stalled frontal boundary and ahead of yet another strong fast moving cold front. Hail of 1.75 inches was reported over southern sections of Northeast Louisiana into Central and Southern Mississippi. The cold front pushed through late on the 3rd bringing much cooler and drier air. Rainfall amounts from 1.00 to 3.00 inches were reported over the HSA with heaviest amounts occurring in Southwest Mississippi and the southern sections of Northeast Louisiana. High pressure built into the area on the 4th and 5th.

By the morning of the 6th, a warm front pushed north ahead of a low pressure center over western Louisiana. The low and an associated cold front moved rapidly east across southern Mississippi during the day. Rainfall amounts ranged from little to no rainfall over Northeast Louisiana to near 2 inches over northern and northeastern sections of the HSA. High pressure built into the area on the 7th and 8th. A dry reinforcing cold front pushed through the area from late on the 8th into the 9th.

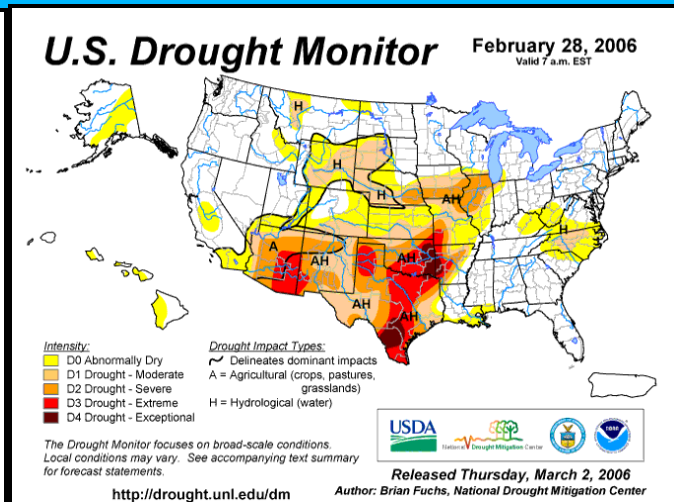
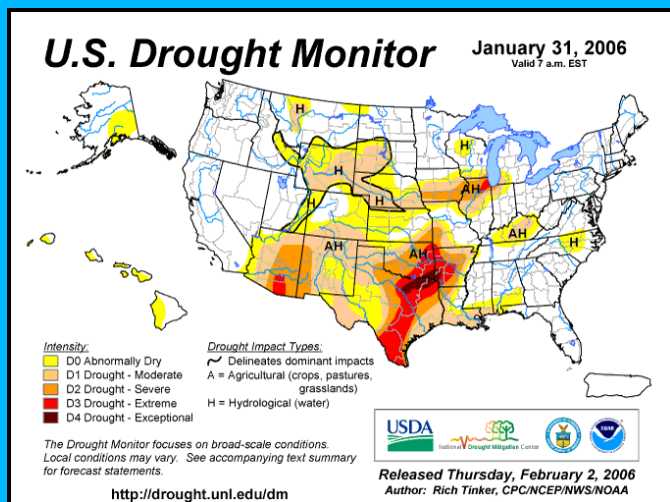
The cold front stalled along the coast acting as a focal point for cyclogenesis in the Northwest Gulf of Mexico. The low pressure center tracked across southern Mississippi on the 10th with another very strong cold front pushing into the area from the northwest. Heavy rainfall occurred over the entire area with the heaviest rainfall extending from Northeast Louisiana through Central and East Mississippi. Rainfall ranged from 1.00 to 3.00 inches over the area. Some heavier 24 hour rainfall totals ending at 7am on the 11th: 2.50 inches at Larto Lake, LA; 2.48 inches at Mize, MS; 2.30 inches at Clayton, LA; 2.27 inches at Bay Springs, MS; and 2.20 inches at Crystal Springs, MS. By the morning of the 11th, light rain had turned to some light snow and flurries over northern sections of the HSA with little or no accumulations. High pressure began to build into the area bringing some of coldest air of the season into the area through the 13th. High pressure moved east allowing a warming trend over the period from the 14th to the 16th.

From the 17th to 25th, fairly miserable weather was evident over the HSA with light rain, drizzle, some freezing rain in northern sections, and several heavy rainfall events. On the 17th, yet another cold front pushed into the area leading the way for a very shallow layer of extremely frigid arctic air. The front stalled along the Louisiana/Mississippi Coast. Upper level southwesterly winds continued to pump moisture northward, up and over the shallow cold air producing rainfall over portions of the HSA. Near the end of the day on the 19th and into the morning of the 20th, freezing temperature had plunged into northern portions of Northeast Louisiana, northwestern and north central portions of Mississippi producing light freezing rain over these areas. Ice built up on trees, power lines, and bridges. The frontal boundary remained stalled along the coastal sections on the 20th and 21st. Early on the 22nd, the front lifted to the north as a warm front. Rainfall from the 17th to 22nd ranged from 0.50 inches to around 1.00 inch. By the evening of the 22nd, the front was sitting along a line from just north of Natchez to just south of Meridian. A line of very heavy rainfall developed just north of this boundary from northern portions of Northeast Louisiana through Yazoo County and then across Attala County to lower Lowndes County in the northeast portions of the HSA. Rainfall totals across this area ranged from 2.00 to 5.00 inches with the heaviest rainfall occurring in Attala County. Some heavier rainfall totals ending at 7am on the 23rd: 4.70 inches at Ethel, MS; 4.23 inches at Kosciusko, MS; 3.89 inches at the Tombigbee National Forest RAWS site; 3.70 inches at Pickens, MS; 3.25 inches at Starkville, MS; and 3.09 inches at Ackerman. By the morning of the 23rd, the front had once again pushed to the Mississippi Coast. The HSA had a brief reprieve from rainfall for most of the 23rd until late afternoon on the 24th. On the evening of the 24th, rainfall once again redeveloped over entire HSA. The 24 hour rainfall totals ending on the 25th ranged from 1.00 to 2.00 inches. Another cold front pushed through the area during the late afternoon and early evening of the 25th. Twenty four hour rainfall amounts, ending at 7am on the 26th, ranged from around 0.50 inches over North and Central Mississippi to around 3.00 inches over Southeast Mississippi. With the passage of the cold front, high pressure finally dominated the weather, bringing dry and cooler weather for the remainder of the month.

River and Soil Conditions...

Rainfall during the month significantly increased soil moisture across the entire area. Soil moisture remains above normal in central and northern portions of Mississippi. In South Mississippi, Northeast Louisiana, and Southeast Arkansas, soil moisture remains near or just slightly below normal.

The U.S. Drought Monitor issued weekly during the month showed much improvement to the abnormally dry conditions over the area. By the end of the month, no abnormally dry areas were noted.



January 31st, 2006 Drought Monitor

February 28th, 2006 Drought Monitor

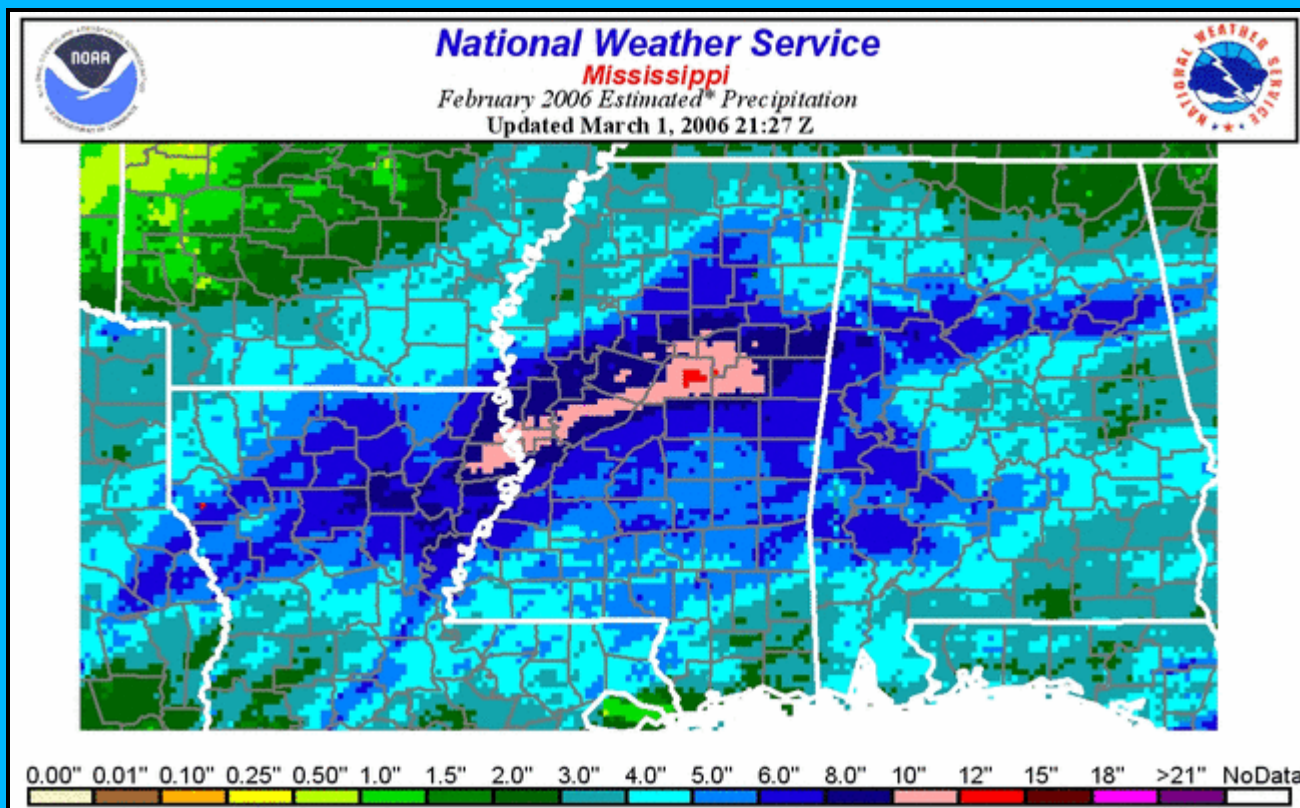
Streamflow remained near normal or slightly above normal over most of the HSA. Streamflow over Southwest Mississippi was running a little less than normal. Above normal rainfall caused moderate flooding on the Big Black River and minor flooding on the Noxubee, Upper and Middle Pearl, Yockanookany, Tuscolameta Creek, Yalobusha, Big Sunflower, and the Lower Yazoo River. Minor to moderate rises occurred along rivers in Northeast Louisiana, Southeast Arkansas, and the Tombigbee Tributaries in Northeast Mississippi.

Based on a near normal rainfall forecast for the 60 to 90 day period over the HSA and current soil moisture conditions, an above normal flood potential exists along the Big Black River Basin and the Upper Pearl River Basin and the Noxubee River Basin. A near or slightly below normal flood potential exists over Southwest Mississippi including the Homochitto River Basin. The remainder of the HSA has a near normal flood potential.

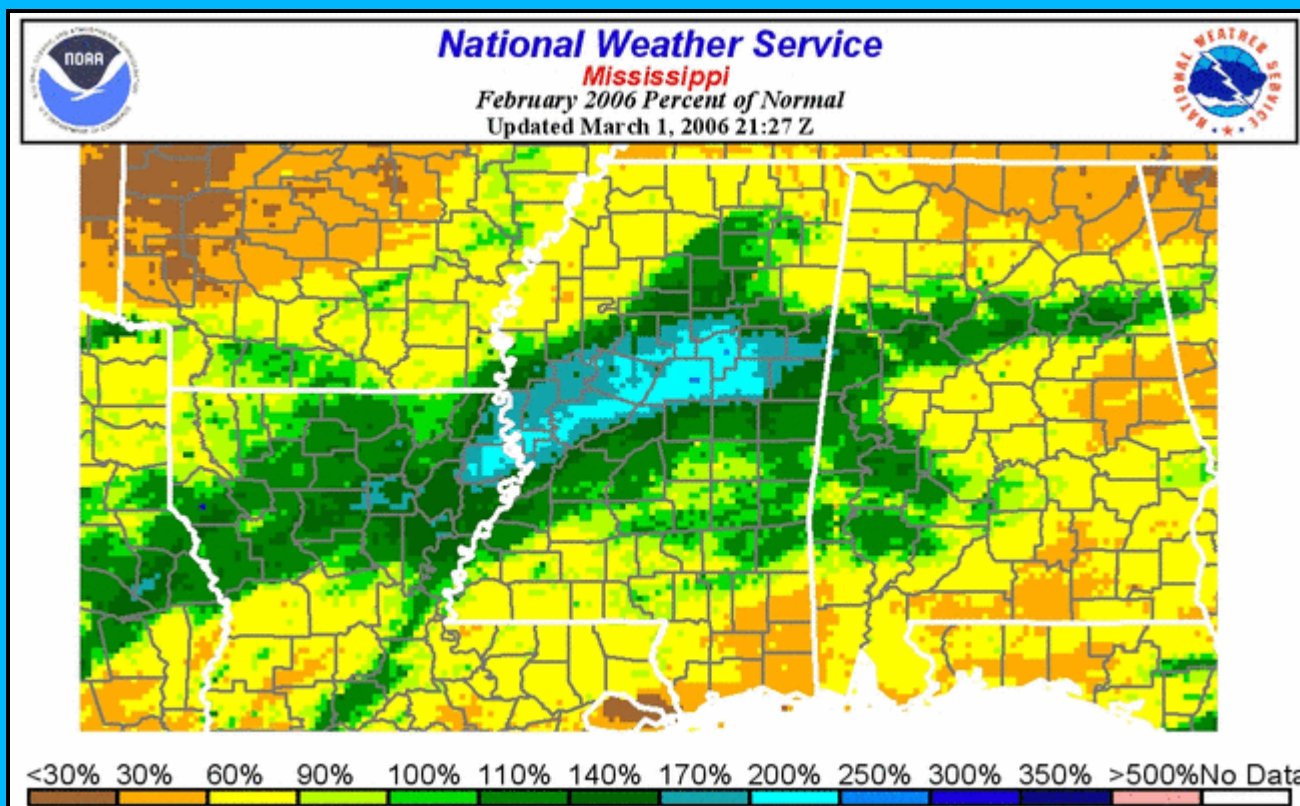
Rainfall for the month of February...

The heaviest rainfall amounts in the HSA from NWS Cooperative Observers (Reports from 7am on January, 31^h until 7am on February 28th) for the month were: 12.41 inches at Kosciusko, MS; 11.77 inches at Pickens, MS; 11.21 inches at Ackerman, MS; 10.55 inches at Starkville, MS; 10.12 inches at Satartia, MS; 10.02 inches at Louisville, MS; 9.95 inches at Brooksville Agricultural Experiment Station, MS; 9.68 inches at Vaiden, MS; and 9.37 inches at Crawford 3W.

Rainfall Multi-Precipitation graphic (MPE) from 7AM on the February 1st to 7AM on March 1st:



February 2006 Rainfall Estimates ***



February 2006 Percent of Normal Rainfall Estimates***

Note: Observers Rainfall and MPE may differ due to observation time.

*** Rainfall estimates in Southeast AR, Bolivar County, northern Sunflower, northern Washington, and northern Leflore Counties in Mississippi are too low.

February Rainfall for Selected Cities...

City Airport	February Rainfall	Departure from normal	2006 Rainfall	2006 Departure from Normal
Jackson, MS	7.10	2.60	13.76	3.59
Meridian, MS	6.78	1.43	11.86	0.70
Greenwood, MS	7.46	1.64	14.35	4.90
Greenville, MS	5.10	N/A	14.29	N/A
Hattiesburg, MS	4.83	N/A	7.50	N/A
Vicksburg, MS	8.69	N/A	12.92	N/A

Mississippi River...

The Mississippi River from Arkansas City to Natchez crested during the first week of the month. River stages trended downward for most of the month with only a slight rise during the last few days of the month.

River stages at Arkansas City and Greenville were near seasonal norms for the first week of the month and stayed below for the remainder of the month. River stages at Vicksburg and Natchez were above seasonal norms until around the middle of the month and then remained below for the rest of the month.

Preliminary high and low stages for the month:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	23.41	02/02/06	9.39	02/28/06
Greenville, MS	34.94	02/02/06	19.89	02/28/06
Vicksburg, MS	30.03	02/03/06	15.62	02/24/06
Natchez, MS	37.43	02/04/06	23.69	02/25/06

Total Flood Warning products issued: 27

Total Flood Statement products issued: 156

Daily Rainfall Products (RRA'S) issued 28

Daily River Forecast Products (RVS'S) issued: 28

Daily River Stage products (RVA'S) issued 28

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Note: Provisional Stage and precipitation data was furnished with the cooperation of the Mississippi, Louisiana, and Arkansas National Weather Service Cooperative Observers, United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), Pearl River Valley Water Supply District (PRVWSD), Pat Harrison Waterway District, Pearl River Basin Development District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USACE Mobile District
USACE Vicksburg District
USACE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
LMRFC
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District
Pearl River Basin Development District